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9 **UNITED STATES DISTRICT COURT**
10 **CENTRAL DISTRICT OF CALIFORNIA**

11 ERNIE BALL, INC., a California
12 Corporation,
13 Plaintiff,
14 v.
15 EARVANA, LLC, a California
16 LLC,
17 Defendants.

Case No. 5:06-cv-00384-JHN-OPx

18
19 **FINDINGS OF FACT AND**
20 **CONCLUSIONS OF LAW**

21 EARVANA, LLC, a California
22 LLC;
23 Counterclaimant,
24 v.
25 ERNIE BALL, INC., a California
26 Corporation,
27 Counterclaim
28 Defendant.

26 Pursuant to Rule 52 of the Federal Rules of Civil Procedure, the Court
27 hereby finds the following Findings of Fact and Conclusions of Law.
28

I.

FINDINGS OF FACT

1. Richard LoJacono ("LoJacono") of Earvana, LLC ("Earvana") and Dusty Walseth ("Walseth"), formerly of Earvana developed an invention in the early 1990's aimed at improving the tuning of stringed instruments, including electric and acoustic guitars. The device is an adjustable compensated nut.

2. LoJacono and Walseth created prototype compensated nuts in 1992-1994, all of which had intonation points configured in a sinusoidal curve or arc. (See Trial Exhibits "2", "11", "18", and "19").

3. Richard LoJacono and Dusty Walseth applied for a patent on March 7, 1994 for the Earvana adjustable compensated nut with sinusoidal arc or curve, under the title "Apparatus and Method of Tuning Guitars and the Like." LoJacono and Walseth assigned the rights to patent to Earvana. The patent thereon issued with number 5,481,956 ("956") on January 9, 1996. (See Trial Exhibit "12").

4. In the fall of 1994, after applying for the '956 patent, LoJacono [an owner of Earvana LLC], met Dudley Gimpel ("Gimpel") at a band rehearsal at the house of Gimpel's ex-wife, Scout. Scout told LoJacono that he should bring his red guitar that he had built himself along to the rehearsal, because Gimpel might like to see it.

5. LoJacono showed Gimpel a red guitar that LoJacono had built, that had an adjustable compensated nut on it and that had a "B-Bender" mechanism. (See Trial Exhibits "68" and "69"). LoJacono told Gimpel that he had talked to Fender Guitars about possibly licensing the adjustable compensated nut to them. Gimpel invited LoJacono and Roxanne Chaviers ("Chaviers"), Gimpel's then girlfriend (now deceased) to visit the Ernie Ball factory and to bring the red guitar.

1 6. In the fall of 1994, about two weeks after the band rehearsal at
2 the house of Gimpel's ex-wife, LoJacono, Chaviers, and Walseth visited the
3 Ernie Ball Factory. During the visit, LoJacono showed Gimpel and other
4 Ernie Ball employees the red guitar, and they discussed the "B-Bender" and
5 the Earvana adjustable compensated nut.

6 7. The Earvana adjustable compensated nut on the red guitar that
7 Gimpel saw in the 1994 meetings was covered by and described in
8 Earvana's '956 patent.

9 8. Two years later, in 1996, Ernie Ball hired Hans Lindauer
10 ("Lindauer"), a student in mechanical engineering, as an intern. Lindauer
11 proposed that he be allowed to conduct a research project into methods of
12 generally improving the tuning of guitars and basses for Ernie Ball. Gimpel
13 approved the project.

14 9. In 1996 to 1997, Lindauer and Gimpel employed their own
15 independent and substantial research and development methods that
16 ultimately lead to the creation and invention of the subject matter of the
17 Ernie Ball 6,433,264 ("264") patent (See trial Exhibit "1"), which is an OEM
18 style single piece fixed compensated nut with intonation points in a non-
19 sinusoidal configuration, meaning not on a sinusoidal curve or arc. A report
20 on the creation of the invention which contained detailed and exhaustive
21 experimental data was prepared by Lindauer in or around 1997. (See Trial
22 Exhibit "58). Lindauer did not know of or take into account the Earvana
23 compensated nut invention in his research.

24 12. In the summer of 1998, there was a meeting between Earvana
25 and Plaintiff Ernie Ball at the Ernie Ball factory. The attendants agreed the
26 meeting would be confidential. Phil Patti ("Patti"), then of Earvana,
27 requested the meeting to sell Ernie Ball on the idea of using the Earvana
28 adjustable compensated nut on their production guitars. The meeting

1 attendees were Patti, LoJacono, Dudley Gimpel, and Sterling Ball.

2 13. At the August 1998 meeting, LoJacono and Patti talked about
3 the Earvana adjustable compensated nut, and gave Gimpel a sample. The
4 nut was configured with the intonation points on a sinusoidal curve. (See
5 trial Exhibit “7”).

6 14. At the 1998 meeting, Gimpel and Sterling Ball showed
7 LoJacono and Patti the prototype of the Ernie Ball OEM style single piece
8 fixed compensated nut with intonation points in a non-sinusoidal
9 configuration that was on a blue guitar. (See Trial Exhibits “8” and “522”).

10 15. Earvana filed a patent application for a fixed compensated nut
11 (“stock-like sinusoid members for tuning a guitar”) on November 14, 1998
12 as application number 29/097,840. The application was abandoned.

13 16. Ernie Ball filed for a patent on its OEM style compensated nut on
14 November 25, 1998 and was issued the patent under number 6,433,264
15 (“’264”) on August 13, 2002. (See trial Exhibit “1”). The Earvana ‘956
16 patent was disclosed to the USPTO during prosecution of the ‘264 patent by
17 Gimpel and Ernie Ball. (See Trial Exhibits “1” and “12”).

18 17. Earvana filed a continuation in part patent application for a
19 sinusoidal OEM style compensated nut (“stock-like sinusoid members for
20 tuning a guitar”) on September 4, 2001, continuing in part the prior
21 abandoned application number 29/097,940, and was issued a patent under
22 number 6,583,346 on June 24, 2003. (See Trial Exhibit “38”).

23 18. Earvana subsequently began manufacturing and selling OEM
24 style compensated nuts that infringe upon all the claims of the Ernie Ball
25 ‘264 patent, including the claim of the intonation points being in a non-
26 sinusoidal configuration.

27 19. Earvana’s business greatly expanded upon copying and sale of
28 the Ernie Ball ‘264 patented design because it was more commercially

1 viable than the sinusoidal compensated nuts Earvana was selling under the
2 '956 and its other patents.

3 20. Despite cease and desist letters from Ernie Ball in 2003 and
4 2005, Earvana continued to infringe the '264 patent, with knowledge of the
5 Ernie Ball patent. (See Trial Exhibits "525", "766", "768", and "2009").

6 21. Earvana never marketed, and never sold a nut infringing upon
7 the '264 patent until after the 1998 meeting at the Ernie Ball factory.

8 22. The infringing products are all the Earvana OEM style nuts,
9 including the following (See Trial Exhibit s "4", "25", "26", "27", "30", "32",
10 "35", "520", "529", "557", "593 - 595", "1081", "1194", and "2009"):

11 a. The nuts used on the production ESP guitar models of:

12 -the ESP Deluxe Series guitars

13 -the 400 and 500 and 1000 Level LTD guitars:

14 (including LTD/F 400; LTD/EX-400; LTD/EX-401;

15 LTD/EX Graphics; LTD/H-401; LTD/H-500; LTD EC

16 500; LTD EC clockwork; LTD EC 500; LTD EC-401;

17 LTD AX 400; LTD AX 401; LTD MH 400; LTD MH-

18 401; LTD MH-417; LTDMHB 400; LTD MHB-401

19 -the 1000 Level ESP Guitars (Including LTD/MH-

20 1000; LTD H-1001; LTD EC-1000;

21 -the ESP Baritones;

22 and including the following nuts:

23 - Earvana ESP style 7 string nut

24 - Earvana ESP style nut

25 -Earvana ESP Baritone Nuts.

26 b. Wholesale distributed nuts:

27 -Earvana Floyd metal shelf nut

28 -Earvana Fender LSR OEM style nuts

- Earvana Gibson OEM style acoustic and electric style
- Earvana 42mm Drop-in-Nuts
- Earvana Gibson Style Drop-in-Nuts
- ESP 7 string shelf nuts
- Esp Acoustic nuts
- Fender drop-in-shelf nuts

(See Trial Exhibit “522”).

23. Earvana’s total sales of infringing nuts to ESP manufacturers in 2004 were \$4,689.05. (See Trial Exhibit “593”).

24. Earvana’s total sales of infringing nuts in 2006 were \$91,080.40. Of that amount, \$40,761.75 was earned from “Online Sales” to retailers at wholesale prices, and the balance of \$50,409.60 was earned from sales to ESP manufacturers for production guitars. (See Trial Exhibit “4-17”).

25. From 2004 through 2007, Earvana sold ESP \$150,000 worth of the infringing compensated nuts. (LoJacono’s trial testimony). Sales to ESP totaled \$4,689.05 in 2004, \$50,409.60 in 2006, \$40,782.00 in 2007, and \$54,119.35 in 2005.

26. Earvana’s total sales of infringing nuts in 2007 amounted to \$76,500.67. Of that amount, \$35,718.67 was earned from “Online Sales” to retailers at wholesale prices, and the balance of \$40,782.00 was earned from sales to ESP manufacturers for production guitars. (See Trial Exhibit “4-1”).

27. Earvana’s total sales for infringing nuts in 2008 [Online and to ESP] were \$9,221.85. (See Trial Exhibit “1198”).

28. Earvana’s total sales for infringing nuts in 2009 [Online and to ESP] were \$21,773.85. (See Trial Exhibit 1198”).

29. Earvana’s total sales for infringing nuts in 2010 [Online and to ESP] were \$17,646.99. (See Trial Exhibit “1198”).

1 Earvana '346 patent. Earvana's patent invalidity claims directed to the
2 Ernie Ball '264 patent have been overruled.

3 2. The Earvana infringing nuts are all OEM style drop in and shelf
4 nuts with intonation points in a fixed non-sinusoidal configuration.

5 **a. Injunction**

6 3. Injunctions issue in patent infringement litigation pursuant to 35
7 U.S.C.A. § 283 in order to prevent continuing infringement. The
8 requirements are: (1) irreparable injury; (2) remedies available at law such
9 as money damages are inadequate; (3) the balance of hardships favors the
10 injunction; and (4) the public interest is not disserved by issuance of the
11 injunction. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (U.S.
12 2006).

13 4. In this case, Ernie Ball is irreparably injured by the continuing
14 patent infringement by Earvana. The infringement devalues the patent and
15 gives an advantage to competitors in the industry, such as ESP, by
16 piggybacking on Ernie Ball's patented technology. The infringement will
17 continue without an injunction, so money damages are inadequate. The
18 balance of hardships favors the injunction, because it is a greater hardship
19 to Ernie Ball to have its valid patent infringed upon than to allow Earvana to
20 continue infringing. Earvana also can produce compensated nuts under its
21 own patent, so is not foreclosed from legitimately doing business. The
22 public interest favoring patents is served by issuance of the injunction.
23 Recovery of damages does not vest the infringer with right to continue use
24 of patent. *Suffolk Mfg. Co. v. Hayden*, 70 U.S. 315 (U.S. 1866).

25 5. The Court therefore finds an injunction appropriate in this case
26 to prevent Earvana from advertising, licensing, manufacturing or selling
27 compensated nuts that infringe upon the Ernie Ball '264 patent, including
28 the Earvana ESP nuts, and the other Earvana OEM style compensated nuts

1 as set forth above.

2 **b. Damages**

3 6. The Patent Act provides that, “[u]pon finding for the claimant the
4 court shall award the claimant damages adequate to compensate for the
5 infringement, but in no event less than a reasonable royalty for the use
6 made of the invention by the infringer, together with interest and costs as
7 fixed by the court.” 35 U.S.C.S. § 284 (2010).

8 7. Ernie Ball put Earvana on notice of the infringement by Earvana
9 of the ‘264 patent by letters in 2003 and 2005. Patent infringement
10 damages run from the time of notice of infringement where the patent
11 number is not identified on the product.

12 8. A reasonable royalty for patent infringement can be calculated
13 from an established royalty, the infringer's profit projections for infringing
14 sales, or a hypothetical negotiation between the patentee and infringer
15 based on the factors in *Wordtech Sys. v. Integrated Networks Solutions,*
16 *Inc.*, 609 F.3d 1308 (Fed. Cir. 2010).

17 9. In calculating a reasonable royalty in this case, the Court
18 considers that:

19 a. By infringing the patented technology from 2004 through
20 trial in November 2010, Earvana earned \$275,032.16 from sales of its nuts
21 to third parties [including ESP guitars and Online retailers].

22 b. The evidence shows that Earvana sold nuts, using this
23 infringing technology, in the range of \$11.95 to \$3.00 each. LoJacono
24 testified that a license agreement for a sole manufacturer for \$6.00 a nut
25 each was too low, and that the price should have been around \$8.00. The
26 lower priced sales, of \$3.00 each, were to a high profile guitar manufacture,
27 ESP, which advertised the Earvana product for Earvana, and thus was not
28 a typical straight licensing arrangement.

1 c. The cost to create the infringing compensated nuts to
2 Earvana is minimal (\$0.60 per nut), and the value is in the technology, not
3 in the plastic product. Earvana provided no evidence of any other costs.

4 d. Given sales of \$275,032.16 and using the \$6.00 per nut
5 contract figure, Earvana sold approximately 45,838 infringing compensated
6 nuts. Given production costs of \$0.60 per nut, total production costs were
7 \$27,502, or about 10% of sales. Therefore, Earvana made a net profit of
8 \$247,529.36.

9 e. Ernie Ball does not license its compensated nut
10 technology and instead uses it to advertise enhance sales and marketability
11 and value of its high end guitars and stringed instruments. It is valuable to
12 Ernie Ball to have the only compensated nut in the market when selling its
13 instruments.

14 f. Certainly it is more valuable to Ernie Ball to maintain its
15 patent monopoly than to license this technology to competitors. Licensing
16 of the technology would bring revenue in a range of \$11.95 to \$3.00 a nut,
17 according to the Earvana sales figures, whereas, by utilizing its patent
18 monopoly, Ernie Ball can use this technology to sell more high end stringed
19 instruments (in excess of \$1,000 each).

20 g. The evidence shows that the infringing technology used by
21 Earvana increased its business from 50 to 85% over prior efforts to sell the
22 Earvana adjustable compensated nuts alone under the '956 patent. The
23 commercial success of the Ernie Ball '264 patentee compensated nut is
24 therefore significant.

25 10. "The determination of a reasonable royalty, however, is based
26 not on the infringer's profit, but on the royalty to which a willing licensor and
27 a willing licensee would have agreed at the time the infringement began.
28 Moreover, the district court could well have discounted MTD's profit figures

1 because the treasurer also testified that the infringing wheelbarrows might
2 have been utilized as loss-leaders at various times during the period of
3 infringement.” *Radio Steel & Mfg. Co. v. MTD Products, Inc.*, 788 F.2d
4 1554, 1557 (Fed. Cir. 1986) (citation omitted).

5 11. Earvana testified to a range of reasonable royalty contracts
6 which it would engage in, and it appears that based on all the above facts
7 and factors, \$8.00 per compensated nut is an amount that Earvana believes
8 it could fairly contract for sales of the technology. Allowing 10% each nut
9 for costs (\$0.80 each), that leaves \$7.20 per nut as revenue. Earvana sold
10 approximately 45,838 infringing nuts, creating revenue of \$330,033.60.
11 Allowing Earvana a 50% profit [or some combination of profit and additional
12 costs] thereon of \$165,016.80, **the reasonable royalty to Ernie Ball is**
13 **thus \$165,016.80.**

14 12. Treble damages may be awarded under 35 U.S.C.S. § 284
15 (2010). However, Plaintiff has not proven that Defendants acted in bad
16 faith, given that Defendant also invented a compensated nut, albeit a non-
17 sinusoidal one. In addition, the small size of Defendant’s business makes
18 additional damages excessive. Attorney fees may also be awarded to the
19 prevailing party in an exceptional case under 35 U.S.C.S. §285 (2010). For
20 the above reasons, this is not found to be an exceptional case.

21 13. The Court declines to impose prejudgment interest and costs
22 under 35 U.S.C.S. § 284 (2010).

23 **B. The Inequitable Conduct Defense**

24 16. “To prove that a patent is unenforceable due to inequitable
25 conduct, the alleged infringer must provide clear and convincing evidence of
26 (1) affirmative misrepresentations of material fact, failure to disclose
27 material information, or submission of false material information and (2) an
28 intent to deceive.” *Impax Labs, Inc. v. Aventis Pharms., Inc.*, 468 F.3d

1 1366, 1374 (Fed Cir. 2006).

2 17. In order to show Plaintiff made an affirmative misrepresentation
3 of material fact to the USPTO – that Gimpel and Lindauer were not the
4 inventors of the subject matter of the ‘264 patent – the Defendant must
5 prove that LoJacono invented the compensated nut claimed in the ‘264
6 patent, and shared this information with Gimpel or Lindauer, and that
7 Gimpel or Lindauer then concealed or made false statements about this to
8 the USPTO during prosecution of the ‘264 patent with intent to deceive.

9 18. Defendant has not met its burden of proof. During trial
10 testimony, LoJacono conceded that what Gimpel saw in the 1994 meetings
11 was a compensated nut covered by and contained in the Earvana ‘956
12 patent. It is undisputed that Plaintiff disclosed the ‘956 patent to the
13 USPTO during the prosecution of the ‘264 patent. Thus, there is neither
14 misrepresentation nor failure to disclose material information to the USPTO.

15 19. Even assuming that the adjustable nut on the red guitar shown
16 to Gimpel in the 1994 meetings was in a non-sinusoidal position, there is no
17 evidence that Gimpel or Lindauer used this as a springboard for their ‘264
18 patent. Indeed, Gimpel and Lindauer gave credible testimony about their
19 independent research and development methods that led to creation and
20 invention of the subject matter of the ‘264 patent.

21 20. There is no evidence that LoJacono or Earvana was the actual
22 inventor of the ‘264 patented matter. Defendant’s prototype nuts all had
23 intonation configurations in a sinusoidal arc or curve. The Court has viewed
24 the red guitar, and while the adjustable nut is not in a perfect sinusoidal
25 configuration, it is in a “curve” or “arc” pattern and bears no resemblance to
26 the non-sinusoidal nut that the ‘264 patent covers.

27 21. Defendant has proven neither an affirmative misrepresentation
28 on the part of Plaintiff, nor an intent to deceive, and has therefore has failed

1 to sustain its burden of showing by clear and convincing evidence that
2 inequitable conduct occurred. For the same reasons, Defendant has failed
3 to establish its common law unclean hands affirmative defense.

4 22. Defendant is liable for patent infringement per the partial
5 summary judgment in this action, and has failed to establish the affirmative
6 defense of inequitable conduct.

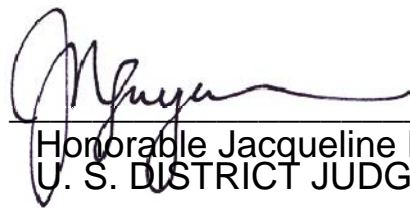
7 **C. The Unfair Competition Claim of Plaintiff**

8 23. Plaintiff contends that the Defendant engaged in unfair
9 competition by using Plaintiff's trade secrets to create competing copy
10 products and selling the products to others. The claim was pled as a
11 common law unfair competition claim, but should have been plead under
12 the Uniform Trade Secrets Act ("UTSA"), Cal. Civ. Code § 3426.1
13 (LexisNexis 2010). The allegations do not state a claim outside of the
14 UTSA. The claim therefore fails.

15
16 **Plaintiff is ordered to submit a proposed Judgment and**
17 **Permanent Injunction within seven days.**

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19 **IT IS SO ORDERED.**

20 Dated: January 21, 2011

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Honorable Jacqueline H. Nguyen
U. S. DISTRICT JUDGE